

Studies in *Hypericum*: validation of new names

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SYNOPSIS. The new names in Part 6 of 'Studies in the genus *Hypericum* L. (Guttiferae)' are validated in advance of publication of the main work. They are:- new taxa (**tax. nov.**): *H. hypericoides* (L.) Crantz subsp. *prostratum* N. Robson (Sect. 20. *Myriandra*), *H. fieriense* N. Robson (Sect. 23. *Triadenioides*), subsects. *Aethiopica* N. Robson, *Pubescentes* N. Robson and *H. collenettiae* N. Robson (Sect. 27. *Adenosepalum*); new combinations (**comb. et stat. nov.**): *H. nitidum* subsp. *cubense* (Turcz.) N. Robson, *H. nitidum* subsp. *exile* (P. Adams) N. Robson, *H. aegypticum* L. subsp. *maroccanum* (Pau) N. Robson, *H. annulatum* Moris subsp. *intermedium* (Steudel ex A. Rich.) N. Robson, *H. annulatum* subsp. *afromontanum* (Bullock) N. Robson.

INTRODUCTION

Part 6 of 'Studies in the genus *Hypericum* L. (Guttiferae)', a monographic series that is intended to cover the whole genus (Robson 1977, 1981, 1985, 1987, 1990), will contain accounts and analyses of Sections 20–28. As this part will not be published before 1994, it is necessary to validate in advance of publication the new names that will appear in it.

Section 20. MYRIANDRA (Spach) R. Keller

Hypericum nitidum Lam., *Encycl.* 4:160 (1797).

When the populations from Cuba and Belize in the *H. nitidum* group are considered along with those in the U.S.A., they can be divided into three subspecies: a) Cuba and Belize (subsp. *cubense*), which is related to the Cuban *H. limosum* Griseb.; b) south-eastern U.S.A. (subsp. *nitidum*); and c) western Cuba and north-western Florida (subsp. *exile*), which is related to *H. brachyphyllum* (Spach) Steudel from south-eastern U.S.A.

H. nitidum subsp. *nitidum*

Leaves subcoriaceous, apex obtuse to rounded-apiculate, margin loosely inrolled leaving lower lamina partly exposed. *Sepals* obtuse to shortly apiculate. *Capsule* cylindric.

U.S.A. (south-eastern Alabama to southern N. Carolina).

H. nitidum subsp. *cubense* (Turcz.) N. Robson, **comb. et stat. nov.**

H. cubense Turcz. in *Bull. Soc. Nat. Moscou* 31(1): 384 (1858).

H. fasciculatum sensu Alain in Leon & Alain, *Fl. Cuba* 3:317 (1953) pro parte.

Leaves coriaceous, apex rounded-apiculate to rounded, margin tightly inrolled leaving only midrib exposed. *Sepals* obtuse to rounded-apiculate. *Capsule* cylindric to rarely ovoid-conic.

Cuba: (Oriente, Las Villas, Isla de Pinos), Belize (El Cayo).

Hypericum nitidum Lam. subsp. *exile* (P. Adams) N. Robson, **comb. et stat. nov.**

H. galioides var. *cubense* Griseb., *Cat. Pl. Cuba*: 39 (1866), non *H. cubense* Turcz. (1858).

H. galioides var. *axillare* sensu Griseb., loc. cit., pro parte (1866).

H. galioides sensu Sauvalle, *Fl. Cubana*: 8 (1868).

H. fasciculatum sensu Alain in Leon & Alain, *Fl. Cuba* 3: 317 (1953) pro parte excl. typum.

H. exile P. Adams in *Contr. Gray Herb. Harv.* no. 189: 33 (1962).

Leaves chartaceous, apex acute to long-acuminate, margin tightly inrolled leaving only midrib exposed. *Sepals* acute to long-acuminate. *Capsule* cylindric to narrowly conic.

U.S.A. (north-western Florida), Cuba (Pinar del Rio, Isla de Pinos).

Hypericum hypericoides (L.) Crantz, *Inst. rei herb.* 2:520 (1776).

Ascyrum hypericoides L., *Sp. pl.* :789 (1753) excl. syn. *Hort. Cliff.* et Plukenet., 2nd ed.: 1108 (1763) excl. syn. Plukenet. Type: Hispaniola, *Hypericoides frutescens erecta, flore luteo* Plumier, *Nov. pl. amer.*: t.7 (1703), lectotype (Robson, 1980:272).

Plumier (1703) distinguished two species from Hispaniola in his new genus *Hypericoides*: *H. frutescens, erecta, flore luteo* and *H. frutescens, humi-fusa, flore luteo*. The erect species is not distinguishable taxonomically from *Hypericum hypericoides* subsp. *hypericoides* as it is known in the other islands of the Greater Antilles, the Bahamas, Bermuda and the mainland (eastern N. America, eastern Mexico to Honduras Republic); but the other represents a taxon that has apparently evolved within Hispaniola, occurring at high altitudes in the Dominican Republic. The occurrence of a few somewhat intermediate specimens in the region between 1600 and 2000 m, where it co-exists with the typical form, indicates that the appropriate rank for this taxon is subspecies.

Hypericum hypericoides subsp. **prostratum** N. Robson, **subsp. nov.**

Hypericoides frutescens, humi-fusa, flore luteo Plumier, *Nov. pl. amer.*: 52 (1703).

Ascyrum foliis lanceolato-linearibus, biglandulosus, ramidiffusus Burman, *Pl. amer.*: 146, t.152 f.2 (1758).

A subsp. *hypericoides* habitu prostrato, folium minoribus anguste oblongis vel oblongo-spathulatis, differt.

Type: Dominican Republic, San Juan, Sabana Nueva, Cordillera Central N. of Rio Arriba del Norte, 1950 m, 17–20.ix.1944, R.A. & E.S. Howard 9080 (BM!, holotype; GH!, MICH!, NY!, US!, isotypes).

Plant prostrate, with stems ? numerous, radiating and branching, forming mats. *Leaves* 3–8(–10) × 1–2.5 mm, narrowly oblong to oblong-spathulate. *Inflorescence*-branching pseudo-dichotomous.

Open *Pinus* forest, grassland and open slopes, (1600–)1800–2900 m.

Dominican Republic (La Vega, Santiago, San Juan, Peravia).

Section 23. TRIADENIOIDES Jaub. & Spach

Socotra, an island of endemics, is critical for the understanding of the evolution of *Hypericum*. It is already known to contain four endemic species, *H. balfourii* N. Robson and *H. socotranum* Good (Sect. 1. *Campylosporus*), the latter with two subspecies (Robson 1985), *H. scopulorum* Balf. f. and *H. tortuosum* Balf. f. (Sect. 23. *Triadenioides*). To these must be added a new species based on one collection from the Hagghiher Mountains by Smith and Lavranos. It is clearly near *H. scopulorum* but is more woody and larger in all its parts and has petiolate leaves, and the lower leaf surface, petiole and young stems are covered with a puberulous indumentum.

Hypericum fieriense N. Robson, **sp. nov.**

H. scopulorum Balf. f. affinis, sed caulibus crassioribus lignosioribus, foliorum lamina ovata subtus cum petiolo et ramis junioribus puberula, inflorescentia 3–5-florata, floribus maioribus sepalis crassioribus, capsulis coriaceis valvis leviter angustissime vittatis fere laevibus, inter alia differt.

Type: Socotra, Hagghiher Mountains (12°35'N, 54°03'E), below Fieri peaks, 1350 m, 21.iv.1967, *Smith & Lavranos* 475 (K!, holotype & isotype).

'Low scrub among *Dracaena cinnabari* trees', 1350 m.

Socotra (Hagghiher Mts).

Section 25. ADENOTRIAS (Jaub. & Spach) R. Keller

Hypericum aegypticum L., *Sp. Pl.*: 784 (1753).

H. aegypticum comprises a series of disjunct populations forming a morphological reduction trend from south Morocco to Crete and Cyrenaica (not Egypt). This trend is almost continuous, but it is possible to recognize three, rather poorly differentiated subspecies. Only essential synonymy is given here.

Hypericum aegypticum L. subsp. **maroccanum** (Pau) N. Robson, **stat. nov.**

H. aegypticum var. *maroccanum* Pau in *Cavanillesia* 4: 157 (1932) ['maroccana'] in Spanish; Maire in *Bull. Soc. Hist. nat. Afr. N.* 24: 206 (1933), in Latin.

Plant erect, (0.15–)0.3–2 m tall, with branches erect to ascending. *Leaves* sessile, plane; lamina (7–)9–18 × (2–)3–4 mm, narrowly elliptic or narrowly oblong-elliptic, acute. *Sepals* 5–6 mm long. *Petals* 10–12(14?) mm long.

Morocco (south-west), Algeria (southern Atlas Mts).

H. aegypticum L. subsp. **webbii** (Spach) N. Robson, **comb. et. stat. nov.**

Triadenia webbii Spach in *Annls Sci. nat. (Bot.)* II, 5: 174, t. 5A (1836), *Hist. nat. vég. Phan.* 5: 372 (1836).

Plant erect to loosely spreading, 0.04–0.4 m tall, with branches erect or usually spreading and often tortuous, forming bushes up to 1 m across. *Leaves* subsessile to shortly (c. 0.3 mm) petiolate, plane or subcucullate; lamina 4–10 × 1.5–3 mm, narrowly oblong to broadly elliptic; acute to obtuse. *Sepals* 5–6 mm long. *Petals* 8–14 mm long.

Lampedusa, Malta, Sardinia, Greece (Ionian Islands, western Peloponnisos), Crete.

H. aegypticum L. subsp. **aegypticum**

Plant spreading 0.05–0.18 m tall, with branches ± spreading and tortuous, forming low bushes. *Leaves* shortly ± (0.4–0.5 mm) petiolate, always (?) ± incurved-cucullate; lamina 3–6 × 1–2 mm, narrowly oblong to broadly elliptic, acute. *Sepals* 3.5–5 mm long. *Petals* 6.5–9 mm long.

Libya (Cyrenaica–Jebel el Akhdar).

Section 27. ADENOSEPALUM Spach

When Sect. *Adenosepalum* (sensu Robson, 1977) has been 'purified' by the removal of the tropical Asian species (*H. elodeoides* group) to Sect. 9. *Hypericum* sensu lato and three Turkish species (*H. huber-morathii* N. Robson, *H. minutum* P.H. Davis & Poulter, *H. formosissimum* Takht.) to Sect. 12. *Origanifolia*, the remaining species form a natural group distributed over most of Africa, Macaronesia, Europe, Mediterranean Asia and western Arabia. It can be divided into four subsections, as follows:

1. Subsect. **Aethiopica** N. Robson, **subsect. nov.** Planta omnino glabra. Folia libera. Bracteeae bracteolaeque haud glanduloso-auriculatae. Typus: *H. aethiopicum* Thunb.
2. Subsect. **Pubescentes** N. Robson, **subsect. nov.** Planta usque ad sepala vel ad partem inferiorem inflorescentiae vel rare ad basin inflorescentiae indumentum ferens. Folia libera. Bracteeae bracteolaeque haud glanduloso-auriculatae. Typus: *H. pubescens* Boiss.
3. Subsect. **Caprifolia** N. Robson, **subsect. nov.** Planta usque ad basin inflorescentiae indumentum ferens. Folia interdum inferiora excepta binatim conjuncta. Bracteeae bracteolaeque interdum glanduloso-auriculatae. Typus: *H. caprifolium* Boiss.
4. Subsect. **Adenosepalum**. Planta usque ad basin inflorescentiae indumentum ferens vel rare caulibus vel foliis vel omnino glabra. Folia libera. Bracteeae bracteolaeque persaepe glanduloso-auriculatae. Typus: *H. montanum* L.

Hypericum collenettiae N. Robson, **sp. nov.**

H. sp. aff. sinaicum sensu Collenette, *Ill. Guide Fls Saudi Arabia*: 262 + photos (1985).

H. somalensi N. Robson affinis, sed indumento breviori, caulibus internodiis plerumque foliis brevioribus, foliis angustioribus, inflorescentia paucioriflora laxiore, floribus maioribus, sepalis petalisque glandulis nigris laminaribus ornatis, inter alia differt.

Type: Saudi Arabia, Asir, Taif–Abha road 82 km S. of Baljurshi, Wadi Mahra, c.1800 m, 5.viii.1982 (fr), *Collenette* 3752 (BM!, holotype; K!, isotype). *Collenette* 1401 (K) is another collection (16.iv.1979) from the same population.

Shady rock crevices, c.1800 m.

Saudi Arabia (Asir).

This apparently solitary population is intermediate in morphology and distribution between *H. somaliense* N. Robson (N. Somalia) and *H. sinaicum* Hochst. ex Boiss. (Sinai and adjacent Saudi Arabia) but distinct from both these species. According to Mrs. Collenette, its habitat is under some threat. An earlier specimen from the same area (between Baljurshi and Abha) has recently come to light and may represent a second population:– Bashwat, 9.viii. 1975 (fl. & fr.), A. *El-Sheikh* in Herb. KSUH 1067 (KSUH).

Hypericum annulatum Moris, *Stirp. sard. elench.*: 9 (1827).

Although originally regarded as endemic to Monte Santa Vittoria esterzili in Sardinia, this species has subsequently been found in another locality in that island (Nodu 'e Littipori) (Arrigoni et al. 1973). Meanwhile it had been

treated as conspecific with the central Balkan *H. degenii* Bornm. and the Ethiopian and East African *H. intermedium* Steudel ex A. Rich. (Milne-Redhead, 1953 *a,b*; Robson, 1958, 1968; etc.).

Further study of this variable species and its unusual discontinuous distribution has shown a) that the widely separate populations can be differentiated as three subspecies and b) that the Mt. Elgon endemic *H. afromontanum* Bullock is no more than a high-altitude form of the East African subspecies. The Ethiopian/Arabian subsp. *intermedium* is morphologically nearest to *H. montanum* L., the sister species of *H. annulatum*.

H. annulatum Moris subsp. *annulatum*

H. perfoliatum var. *annulatum* (Moris) Fiori in Fiori & Paoletti, *Fl. Anal. It.* 1: 389 (1898), *Nuovo Fl. Anal. It.* 1: 524 (1924).

H. degenii Bornm. in *Magyar Bot. Lap.* 9:90 (1910).

Stem without red or black glands, densely shortly pubescent. Leaves without laminar black glands, densely shortly pubescent. Sepals long- to short-glandular-ciliate (cilia shorter than to two or more times as long as glands), with laminar glands all pale. Petals without punctiform laminar black glands, not tinged red in bud.

Sardinia, [Yugoslavia] (southern Serbia, Macedonia), northern Albania, Bulgaria, northern Greece.

H. annulatum Moris subsp. *intermedium* (Steudel ex A. Rich.) N. Robson, **comb. et stat. nov.**

H. intermedium Steudel ex A. Rich., *Tent. Fl. Abyss.* 1: 95 (1847).

H. intermedium forma *obtusifolium* R. Keller ex Moggi & Pisacchi in *Webbia* 22: 272 (1967) in synon.

H. annulatum sensu Cufod. in *Bull. Jard. bot. Etat Brux.* 29, Suppl.: 588 (1959); Moggi & Pisacchi in *Webbia* 22: 272 (1967) pro parte; Collenette, *Ill. Guide Fls Saudi Arabia*: 261 + photo (1985), pro parte excl. typum et spec. cit. ex Harar.

Stem without or rarely with few black glands, ± sparsely puberulous to glabrous. Leaves without laminar black glands, ± sparsely and very shortly pubescent to puberulous or glabrous. Sepals short- to long-glandular-ciliate (cilia shorter than to two or more times as long as glands), occasionally with some laminar glands black. Petals with few (rarely more numerous) punctiform laminar black glands, rarely red-veined in bud.

Saudi Arabia (Asir), Sudan Republic (southern Red Sea Hills), northern Ethiopia (Eritrea to L. Tana and northern Shoa).

H. annulatum Moris subsp. *afromontanum* (Bullock) N. Robson, **comb. et stat. nov.**

H. afromontanum Bullock in *Kew Bull.* 1932: 492 (1932).

H. annulatum sensu Milne-Redh. in *Kew Bull.* 8: 435 (1953), *Fl. Trop. E. Afr., Hypericac.*:6 (1953); Moggi & Pisacchi in *Webbia* 22: 272 (1967) pro parte; Agnew, *Upland Kenya Wild Fls*:186 (1974); N. Robson in Bamps, Robson & Verdc., *Fl. Trop. E. Afr. Guttif.*:30 (1978).

Stem usually with numerous black (very rarely red) glands, densely to sparsely puberulous or rarely glabrous. Leaves sometimes with few to numerous laminar black glands, puberulous above and densely pubescent beneath or very rarely wholly glabrous. Sepals long-glandular-ciliate (more than twice as long as glands), usually with some or all laminar glands black. Petals with few distal or numerous scattered punctiform laminar black glands, always (?) red-tinged in bud.

Southeastern Ethiopia (Harar), East Africa (eastern Uganda, southwestern Kenya, northern Tanzania).

The Harar population is somewhat intermediate between subsp. *afromontanum* and subsp. *intermedium*, but is more similar to the former than the latter.

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